Intra-Molecular Recursive Fusion Supported by Self-Constricting Bose-Einstein Condensates

13 May 2025
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Introduction

Bose-Einstein Condensates have a number of exciting applications ranging from quantum computing to time-viewing and can be created either through control over the temperature of a molecule or, preferably, through the control of the positioning of a molecule either within what are known as nano-crawlspaces or through self-constriction; a proposal first made by this author in the publication of 19 August 2021.

Both an isotope of rubidium called rubidium-82 as well as its stable variant have interesting properties with relation to the amplification of ultraweak electrical energy including neutrino energy into coherent electrons which may be measured by our equipment. However, never before has the incorporation of an unstable isotope such as rubidium-82 into a Contortion-Constriction-Induced Bose-Einstein Condensate (CCIBEC) been considered.

Abstract

In the process of exploring the potentially unique temporal dynamics of a CCIBEC containing an unstable isotope and whether the introduction of an unstable isotope into the structure would help or hinder the molecule’s ability to create useful temporal linkages, this author identified an alternative application for such a molecule.

Although the temporal footprint of such a molecule would be in constant flux (this may be a hindrance or an aid depending upon the intent of the user when prediction and causation are the objective,) such a molecule would exhibit unusual thermal characteristics once the rubidium-82 or any other unstable isotope decayed in the context of the interior of such a molecule.

If an unstable isotope such as rubidium-82 decayed in this context, the proton and two neutrons released would be simultaneously “free” and yet trapped within the overall BEC structure. The BEC structure would continue to maintain its integrity. The proton and neutrons would naturally move with substantial force within the molecule and would repeatedly deflect from the electron clouds of the surrounding atoms. With each bounce, the temperature of the interior of the BEC would increase. Although the temperature would not increase sufficiently for the proton to fuse with the rubidium or with other elements, the temperature would be sufficient for the proton to combine with the free neutrons. Because of the intrinsic properties of the BEC, the electrons in the BEC which orbit the elements composing the original BEC could be expected to continue to orbit the individual component atoms and not to migrate to the free proton. This means that the proton and the neutrons would be free to fuse into ^2H or ^3H with little resistance. The BEC is useful, in this regard, both for trapping the free proton and neutrons as well as for

preventing the proton from acquiring its own electron, which, if it did, would be a hindrance to fusion.

A typical fusion reaction begins when gluon streams emanating from the proximal passage of protons as they pass by one-another whilst moving at high velocities. These intersecting streams result in the creation of a neutron from component quarks and allow for two protons to combine with neutron or neutrons serving as a stabilizing mechanism. The thermal energy associated with the fusion reaction, however, is the result of the abrupt motion of the protons toward one-another and a series of repeated, unseen attempts by the protons to repel one-another before, finally, neutrons are conjured and stabilize the newly created element. Because these cycles of attraction and repulsion are not symmetrical, the protons slamming into one another do not mutually cancel one-another's kinetic energy. When stabilization finally occurs, the newly created element finds itself moving with substantial energy which is thermal in nature as the back-and-forth oscillation of the nucleus is extreme with relation to the electron cloud and continues on even after the fusuion event, much like a ball hanging from a string within a bell bouncing back and forth within the bell-housing. This author has already written about the true dynamics of fusion in other publications, however, it is important to reiterate these dynamics to the reader.

In this case, we are considering a fusion reaction involving multiple neutrons and a single proton. Even without a second proton, however, protons and neutrons may still bond with one-another and generate the same sort of thermal energy, forming strong atomic bonds. A single proton and a single neutron, however, because of the abrupt collision between the two when fusion occurs, generate heat without regard to the fact that no new neutrons are created. Although ^{2}H is stable, ^{3}H is unstable. Under the condition of high heat as well as influence from electrons associated with the BEC structure, the decay rate of ^{3}H could be expected to be artificially amplified under the aforementioned condition. When the ^{3}H decays, this would have to be considered a fission event. This fissioning produces even more heat energy and allows for the process of fusion to begin again. Without the second neutron, the ^{2}H would not decay and the process would not be recursive. However, with the addition of a second neutron, this second neutron may break away and re-combine with the ^{2}H repeatedly. This may be termed *recursive fusion.*

This author has previously written (ibid.) about purposefully bringing about fission-fusion-fission cycles (recursive fusion) and has speculated that this is what enables the Sun to generate energy without perceptibly expending any of its fuel supply. Although this may have applications in the development of next-generation thermonuclear weapons (ibid.,) it is now apparent that unstable isotopes of virtually any element may be introduced to a CCIBEC structure in order to bring about a self-sustaining fusion-fission-fusion cycle. In short, each of these molecules can become self-sustaining fusion micro-reactors and may be arrayed in order to generate large quantities of heat. Care must be taken not to place too many of these nodes too closely to one-another as sufficient heat would cause the BEC structure to disintegrate.

Conclusion

The implications of this observation are beyond profound. If the physical constriction of a molecule can cause it to behave as a BEC and the structure of the BEC can prevent free protons and neutrons generated in its interior from escaping the structure, the incorporation of an unstable isotope into that molecule would necessarily constitute the construction of a type of fusion micro-reactor which requires no exceptional outside infrastructure in order to sustain or contain the reaction.

Although the concept of small-scale fusion reactors has been floated by this and other authors previously, to this author’s knowledge, no one has, as-yet, proposed turning Bose-Einstein Condensates into self-sustaining fusion reactors. Obviously, large numbers of these molecules would, in the aggregate, have the potential to generate large quantities of heat energy. All that would be needed, from there, would be a thermo-electric converter in order to harvest electrical energy from the process.